$0 \quad < FN \leq FR \quad < \quad FN \leq FF < FN \leq FF + FR \quad < \quad FN \leq 2FF < FN \leq 2FF + FR$

| WAIT | REFILL | WAIT | REFILL | WAIT | REFILL |

$n = 0$ $\qquad\qquad\qquad$ $n = 1$ $\qquad\qquad\qquad$ $n = 2$

REFILL IF $(n-1) FF + FR < FN \leq nFF$

WAIT IF $nFF < FN \leq nFF + FR$

FIG. 12